

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1-8. (Cancelled)

9. **(Currently Amended)** A method for controlling the transmission of data between at least two stations over a transmission medium, each station including data links for applications with assigned priorities and parameters identifying a quality of service, said method comprising the steps of:

establishing a new data link in a first station having an assigned priority;

assigning the data link to a first application;

determining a function of the available free channel capacity of the transmission medium[[,]]

determining together with the occupancy of the transmission medium by existing data links;

determining assigned priorities of the existing data links; and

restricting the new data link ~~according to~~ based at least on the determined function, determined occupancy, and the determined assigned ~~priority of the first application as compared to existing~~ priorities of the existing data links.

10. (Currently Amended) The method in accordance with claim 9, wherein:

[[a)]] during the establishment of the new data link, determining ~~the first station determines~~ whether the measure of the available free channel capacity corresponds to a measure of the necessary channel capacity given by the parameters of the first application, with at least part of any data traffic which is assigned to applications with lower priority than the priority of the first application being considered, in the context of the determination step, to be free channel capacity, and ~~if the result of the determination is positive, the data link is established, and~~

~~b) — if the result of the determination is negative the establishment of the data link is suspended, at least temporarily.~~

based at least on the determination, establishing a link.

11. (Previously Presented) The method in accordance with claim 10, wherein the channel capacity is regarded as free up to the point where a threshold is reached, with this threshold corresponding to a relative fraction of the data traffic which is assigned to applications with a lower priority.

12. (Currently Amended) ~~The method in accordance with claim 9, wherein:~~
A method for controlling the transmission of data between at least two stations over a transmission medium, each station including data links for applications with assigned priorities and parameters identifying a quality of service, said method comprising the steps of:

establishing a new data link in a first station having an assigned priority;

assigning the data link to a first application;

determining a function of the available free channel capacity of the transmission medium, together with the occupancy of the transmission medium by existing data links;

restricting the new data link according to the determined function and the assigned priority of the first application as compared to existing priorities, wherein

a) during the establishment of a new data link by the first station, establishing the data link ~~in-established~~ without regard for the current utilization,

b) communicating a message to the first station if the transmission medium is occupied by data links assigned to an application with ~~at least~~ a second priority corresponding to that of the first application[[,]] by at least one of the ~~second two~~ stations which are maintaining ~~these links signals in such a way that on the~~ data links assigned to the application with the second priority via the transmission medium ~~a message is communicated with the highest priority to the first station,~~ and

c) at least temporarily suspending the new data link after ~~it has received~~ receiving the message, ~~the first station suspends the new data link, at least temporarily.~~

13. (Currently Amended) The method in accordance with claim 12, wherein ~~if the result of establishing the link is negative, setting~~ a delay time based at least on the establishing of the data link and after the delay time, repeating ~~is set after the expiry of which~~ steps a) to c) ~~are repeated~~.

14. (Previously Presented) The method in accordance with claim 13, wherein after each repetition the delay time is increased by a discrete value.

15. (Previously Presented) The method in accordance with claim 14, wherein the repetitions continue until either the establishment of a data link is permitted or the attempt to establish it is finally halted by a termination condition.

16. (Previously Presented) The method in accordance with claim 14, wherein the duration of the suspension before steps a) to c) are repeated can be prescribed as part of the message by the second station as a function of an assessment of a second data link.